

What is claimed:

1. A method of identifying an agent that selectively suppresses toxicity to a neuronal cell, comprising:
  - 5 (a) contacting test cells, which are engineered neuronal cells, with a candidate agent;
  - (b) determining viability of test cells contacted in (a) with the candidate agent; and
  - (c) comparing the viability of test cells determined in (b) with an  
10 appropriate control,wherein if the viability of the test cells is more than that of the control cells, then an agent that selectively suppresses toxicity to neuronal cells is identified.
- 15 2. The method of claim 1, comprising further assessing, in an appropriate animal model, the selective toxicity-suppressive activity of the agent that is identified.
3. The method of claim 1, wherein the engineered neuronal cells express a  
20 mutant huntingtin protein.
4. The method of claim 1, wherein the candidate agent is a tubulin inhibitor.
5. A method of treating or preventing a neurodegenerative disorder associated  
25 with polyglutamine (polyQ) expansion, in an individual, comprising administering to the individual a therapeutically effective amount of an agent identified by the method of claim 1.
6. The method of claim 5, wherein the neurodegenerative disorder is selected  
30 from the group consisting of: Huntington's disease, spinobulbar muscular atrophy, dentatorubral pallidoluysian atrophy, and the spinocerebellar ataxias type 1, 2, 3, 6, 7, and 17.

7. The method of claim 5, wherein the agent is a tubulin inhibitor.